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REMARKS

Claims 1-26 are pending in the present Application. Claims 1, 6-8, 19 and 20 have been amended. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Information Disclosure Statement

The Examiner has requested, due to the large number of documents submitted, that the Applicants provide a concise explanation of why the documents were submitted and how they are understood to be relevant. As is clear from 37 CFR 1.97(h), the filing of an information disclosure statement is not an admission that the information cited in the statement is material to patentability. While a detailed review of each the submitted documents has not been made by an agent or attorney associated with this case because the documents appear to relate to promoters used in bisphenol synthesis, the references were cited in order to clearly comply with 37 CFR 1.56 because they may comprise information that the Examiner may find to be material to patentability.

Although Applicants can not speak to the materiality of one reference versus another reference, in an effort to respond to the Examiner's request, Applicants provide the below list of references:

US 5302774

EP 0 856 505

Despite the Examiner's request, Applicants are confident that the Examiner has considered the totality of the submitted references in as much as the Examiner has initialed most of the Information Disclosure Statements. Applicants respectfully note that Reference No. 7 on the Information Disclosure Statement filed on December 11, 2003 was not initialed.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. In particular, the Examiner has pointed out that the normal meaning of ketone would not embrace the compounds listed in Claim 8. Applicants have amended Claim 1 to address this issue. Furthermore, Applicants have amended Claims 8, 19 and 20 for consistency.

Claim 6-8 stand rejected for use of the term "comprises" to define a group. Previously use of the word "comprises" when defining a group was acceptable as long as the language took the form "comprises A, B or C". As this practice has changed Applicants have amended their claims to recite "selected from the group consisting of" as suggested by the Examiner.

Claim Rejections Under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a)

Claims 1-3, 5-7, 9-12 and 15-19 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 5,302,774 to Berg et al. (Berg). Claims 1-23 stand rejected as unpatentable over Berg in view of U.S. Patent No. 4,400,555 ('555), U.S. Patent No. 4,822,923 ('923), and U.S. Patent No. 4,859,803 ('803) due to obviousness. Applicants respectfully traverse these rejections.

Berg is directed to a process for the production of bisphenols from acetone and phenols using a sulfonic acid ion exchange modified with alkyl-SH groups. Berg teaches that the addition of water to the reaction can improve selectivity. (Col. 1, lines 52-55) Berg also discloses that the addition of water helps to maintain the "uniform activity" of the catalyst. (Col. 2, lines 22-25) Furthermore Berg teaches that the amount of water added to the educt mixture is 0.6 to 5% by weight. (Col. 2, lines 67-68). Berg does not teach or suggest modification of the amount of water added to the reaction feed based upon *para-para* bisphenol selectivity. The examples of Berg utilize a single concentration of water and Berg does not teach or suggest that the amount of water should be modified, let alone modified on the basis of the *para - para* bisphenol selectivity as is instantly claimed.

'555, '923 and '803 have been cited to provide various teachings such as use of a multi stage reaction and recycle of the reaction mixture. '555, '923 and '803, like Berg, do not teach or suggest monitoring the *para-para* bisphenol selectivity or adjusting the water concentration in the reaction feed based upon the *para-para* bisphenol selectivity.

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To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Barient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Similarly, for an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Applicants respectfully note that Berg does not disclose determining the bisphenol selectivity nor adjusting the concentration of the water on the feed based on the bisphenol selectively. Accordingly, Applicants believe that Berg does not anticipate the claims 1-3, 5-7, 9-12 and 15-19. Similarly, since '555, '923 and '803 do not rectify the deficiency of Berg, Claims 1-23 are non-obvious.

Claim 24 is rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Berg, JP 57-31629, JP 10-21257 or JP 10-251180. Claims 24 and 25 also stand rejected as obvious in view of Berg, JP 57-31629, JP 10-21257 and JP 10-251180 in view of admitted prior art. Applicants respectfully disagree.

Berg discloses the inclusion of water in a process for the production of bisphenols from acetone and phenols using a sulfonic acid ion exchange modified with alkyl-SH groups. Berg does not disclose controlling the amount of water in the reaction feed based upon the amount of catalyst and catalytic activity. In fact, Berg teaches that catalytic activity remains uniform (Col. 2, lines 24-25).

JP 57-31629 discloses reacting phenol and acetaldehyde in the presence of an acid catalyst and water. While the abstract mentions a high selectivity coefficient, the abstract does not teach or suggest controlling the amount of water in the reaction feed based upon the amount of catalyst and catalytic activity.

JP 10-21257 discloses adding water in an amount of 0.05 to 0.5 wt% to a reaction for producing bisphenol A and reducing the amount of water over time. While the abstract discloses reducing the amount of water with time, the abstract does not teach or suggest controlling the amount of water modifying or altering the amount of water in the reaction

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based upon the amount of catalyst and catalytic activity or to maintain a selectivity of at least about 94% as is instantly claimed.

JP 10-251180 discloses adding water in an amount of 0.05 to 0.5 wt% to a reaction for producing bisphenol A. The abstract does not teach or suggest controlling the amount of water in the reaction based upon the amount of catalyst and catalytic activity.

Because none of the cited references teach all elements of the claim, namely controlling the amount of water in the reaction based upon the amount of catalyst and catalytic activity, none of the cited references, either singly or in combination can anticipate Claim 24 or make obvious Claims 24 and 25.

Claim 26 is rejected under 35 U.S.C. § 102(b), as allegedly anticipated by, or, in the alternative rejected under 35 U.S.C. § 103(a) as unpatentable over Berg, JP 57-31629, JP 10-21257 or JP 10-251180. Applicants respectfully disagree.

As discussed above, only one of the cited references, JP 10-21257, discloses changing the amount of water added to the reaction. JP 10-21257 generally describes reducing the amount of water over time. JP 10-21257 does not teach or suggest a relationship between the *para-para* bisphenol selectivity and water content of the reaction feed nor does JP 10-21257 disclose keeping the selectivity within 1% when making a change in the feed water content. Without these teachings, JP 10-21257 can neither anticipate or make obvious Claim 26.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

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If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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